Optical and Infrared Imaging Studies of Debris Disks

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The presence of debris disks around nearby main sequence stars requires ongoing dust production from asteroidal collisions and cometary passages, and therefore suggests the presence of a planetary system. The internal structure of these disks includes central holes, azimuthal asymmetries, radial gaps, and warps that can betray the presence of unseen planetary perturbers. In this talk, I'll review what is known about the internal structure of debris disks from optical, near-IR, and thermal-IR measurements, including very recent results from the Spitzer Space Telescope, and speculate on the contributions that Herschel and SAFIR might make to this field.

From Spitzer to Herschel and Beyond Pasadena, California, June 2004 Conference Program and Abstracts